A New Agenda for a New Michigan

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Hundreds of Michiganians contributed to this report. Their ideas and insights greatly shaped our recommendations. There are six individuals who made huge contributions to the development of this report:

Steve Hamp (then President of The Henry Ford) was a member of our Leadership Council for most of this project. His ideas and perspective were, as always, enormously helpful to us.

Don Grimes of the Institute of Labor and Industrial Relations at the University of Michigan and Doug Drake of Public Policy Associates served as project staff. They did their usual terrific job in collecting and analyzing data as well as offering their insights on the content of the report.

Benita Melton of the Charles Stewart Mott Foundation was not only their program officer for this project, but participated fully in the development of the report.

James Duderstadt, President Emeritus of the University of Michigan, and Mark Murray, President of Grand Valley State University, provided guidance throughout the project and were particularly helpful in the development of the policy agenda.

Executive Summary

Michigan's economy is reeling from an unprecedented six consecutive years of declining employment—maybe most worrisome, the past three years during a national economic expansion. There is widespread concern that what comes next will not be as good as what has been lost.

The need for a new agenda is clear. At Michigan Future, Inc. we have come to believe that Michigan's decline is caused, in large part, because Michigan—its citizens, enterprises, and communities—has been slow to adapt to a rapidly changing global economy. Today, leading-edge communities are leaving behind the Industrial Age. They are adapting quicker and better to a more knowledge-driven and entrepreneurial economy: what New York Times columnist Thomas Friedman has labeled the "flat world."

This report is designed to answer the question, "What really matters in better positioning Michigan and its regions for success in a knowledge-driven and entrepreneurial economy?"

We started with a clean sheet. We didn't assume that state and local policy was the answer. Nor did we start with preconceived notions of what the right answers are.

Our basic conclusions are:

1. Our answer to the question, "Where do we want to go from here?" is a high-prosperity Michigan, best measured by a per capita income above the national average no matter how well the national economy is faring. This is a status we enjoyed for most of the first 70 years of the past century. After more than three decades of continuous decline compared with the nation, we are now consistently below the national average in both upturns and downturns.

2. The only reliable path to a high-prosperity Michigan is to be concentrated in knowledge-based enterprises. There is a clear pattern across the country that the states, and particularly metropolitan areas, with the most successful economies are those that are concentrated in high-pay, knowledge-based industries: information, financial services and insurance, professional and technical services, and management of companies.

   In the past, Michigan was able to flourish with an economic base concentrated in factories, farming, and tourism. No more. In a flat world, these functions increasingly are either being done elsewhere or they are lower-wage industries.

   Michigan is lagging the nation mainly because of our slow growth in the dynamic, high-wage sectors of the knowledge economy. That, combined with a still astonishingly high dependence on the now uncompetitive domestic auto industry, means that we almost surely will continue to lag the nation for the next several years.

3. Economies are regional. States and municipalities are political jurisdictions, they are not economic units. State economies can best be understood as the sum of their regional economies.

4. What most distinguishes successful areas is their concentration of talent, where talent is defined as a combination of knowledge, creativity, and entrepreneurship. Quite simply, in a knowledge-driven and entrepreneurial economy, the places with the greatest concentrations of talent win.

   Metropolitan areas without concentrations of talent will have great difficulty retaining or attracting knowledge-based enterprises, nor are they likely to be the place where new knowledge-based enterprises are created. So in a flat world, economic development priority 1 is to prepare, retain, and attract talent.

Our agenda to help better position Michigan and its regions to succeed in a knowledge-driven economy is centered on (1) developing a culture, and (2) making key public investments that are aimed at preparing, retaining, and attracting talent.

First, we need to resist the pressure to try to save jobs and enterprises that are no longer competitive. Such efforts are tilting at windmills (they won't work) and, most important, they take time, energy, and resources away from doing what is needed to succeed in a flat world.

For the past dozen years, Michigan has centered its economic development strategy on cutting taxes. It didn't work. And there is no evidence that it will work: the most successful areas around the United States are not characterized by low taxes.

Instead, we believe the priority actions that can best position Michigan to succeed in the context of a flat world are as follows:

Strategic Priority 1: Build a culture aligned with the flat world.

Culture trumps policy. Our expectations about the economy and how one constructs a good-paying career are a big driver of how successful we will be in the future. Long-standing Michigan beliefs about the economy are now impediments to our future success.

In a world where economic growth is driven by knowledge and innovation, the most successful regions will be those which highly value:

- *Learning.* Instilling the love of learning may well be the most important foundation for economic success in a world characterized by accelerating creative destruction of both jobs and enterprises.
- *An entrepreneurial spirit.* This is more than starting a business, although we need far more of that. It is a community that stops thinking of employment as a long-term entitlement to a good job and starts valuing competition and constant reinvention of one's career.

- *Being welcoming to all.* The places that do the best in attracting talent from anywhere on the planet win. This means building a culture that condemns rather than tolerates discrimination and segregation, as well as welcoming, with open arms, talented people from outside Michigan.

Strategic Priority 2: Invest in higher education first and foremost.

Our higher education institutions, both universities and community colleges, are the most important assets we have in developing the concentration of talent we need to be successful in a knowledge-based economy. This is particularly true of our major research universities.

We propose a dramatic new structure for state support of higher education built around three principles:

- Institutional independence (autonomy) at public universities and community colleges.
- Rather than funding institutions, state higher education funds should go to students—no matter where they come from.
- Provide a substantial state match for federal research funding.

Strategic Priority 3: Build regions that are attractive places to live.

The most successful regions across the country are those where both the suburbs and central cities are prospering. Our framework for developing metropolitan areas that are attractive places to live for talented individuals:

- Create vibrant central city neighborhoods that offer something different from the suburbs, neighborhoods characterized by an active street life: safe, with high densities, a mix of residential and commercial uses, an active arts and entertainment scene and a walkable environment.
- Provide a quality infrastructure throughout our metropolitan areas. Traditionally this has meant physical infrastructure such as transportation, water, and sewer. These are still important, but it may turn out in a knowledge economy that the elements of infrastructure that matter most are (1) advanced connections to the Internet; (2) international airports;—both for their connections to the global economy—and (3) green infrastructure (system of open spaces) as a key amenity in retaining and attracting talent.

Strategic Priority 4: Attract export-based business investment.

Our framework for how best to attract export-based business investments:

- Business taxes should be easily understood and have the broadest base and lowest rate possible to raise needed revenues.
- Regulations should be minimized so as to encourage competition and innovation. This can and should be done without reducing worker or environmental protections.

- Stay away from government deciding on industries of the future to invest in.

Strategic Priority 5: Align K-12 education with a knowledge-driven economy.

There are no shortcuts. We are going to have to do the hard work to develop a quality flat-world K-12 system. We need to develop educators, from superintendents to classroom teachers, who are thoroughly grounded in the realities of the flat world. And we need to give them the ability to experiment and innovate to help all students develop a love of learning and the academic and soft skills that are required to succeed in the flat world.

Strategic Priority 6: New leadership.

It's inconceivable to us that the big changes we are recommending can happen without strong civic and business (and ultimately political) leadership. If this project is going to avoid just sitting on the shelf, there needs to be some group with clout that takes ownership of this agenda. It is an essential ingredient in our future economic success.

Given that so much of what needs to be done is regional, new leadership should be organized on a metropolitan area basis with the groups networked together for state action. The most likely place to start building a new leadership is with leaders of those enterprises that are competing nationally or, better yet, internationally for talent. They are the enterprises who care most about our ability to prepare, retain, and attract talent.

We at Michigan Future, Inc. have made a long-term commitment to this effort. We are going to work hard at sharing our ideas with Michiganians—particularly those in leadership positions. Our initial goal is to change the public conversation in Michigan: switching to a discussion about how we do well in the economy of the future, rather than what we can do to save the past, or even worse, who is to blame for the decline of the old economy. In the longer term, we will try to be a catalyst for the formation of the kind of regional leadership structure we think is vital for our ultimate success.

We are willing to make this commitment because we know the payoff from success is huge. As scary and difficult as this change is, the evidence is that, just as it was a century ago, if Michigan is successful in making this transition we can become once again a place where if you are smart and willing to work hard, most Michiganians can and will earn a good income to raise a family and pass on a better opportunity to their children.

I. A New Michigan

Michigan's economy is reeling from an unprecedented six consecutive years of declining employment—maybe most worrisome, the past three years during a national economic expansion. There is widespread concern that what comes next will not be as good as what has been lost.

There is good reason to be worried.

The current downturn is largely structural, not cyclical. The jobs and enterprises that have been lost are likely gone forever. And it is clear that there are more losses coming in the next few years. Nor is the current downturn something new. For more than three decades, Michigan has grown slower than the nation. We are no longer a leading-edge community.

Clearly, how to revive the Michigan economy is Topic A in our state today. We believe the need for a new agenda is clear. At Michigan Future, Inc. we have come to believe that Michigan's decline is caused, in large part, because Michigan—its citizens, enterprises and communities—has been slow to adapt to a rapidly changing global economy. Today, leading-edge communities are leaving behind the Industrial Age for a more knowledge-driven and entrepreneurial economy. They seem to be adapting quicker and better to the requirements of a new economy.

It is clear to us that the only way to reverse these trends is to let go of the past—no matter how good it was to us—and embrace the future: a future where successful communities will be far more knowledge-driven and entrepreneurial.

This report is designed to answer the question, "What really matters in better positioning Michigan and its regions for success in a knowledge-driven and entrepreneurial economy?"

We started with a clean sheet. We didn't assume that state and local policy was the answer. Nor did we start with preconceived notions of what the right answers are. Rather, we identified the most successful areas in the country and tried to figure out what distinguished them from us, what assets we most needed to nurture here. We read a lot, collected a lot of data, and talked extensively with thought leaders from around Michigan.

We believe this "go where our findings take us approach" paid off. It forced us to question many of our assumptions about how public policy and civic leadership can best spur economic growth. As you will see, the conclusions we have reached differ greatly from those that dominate the public conversation in Michigan today as well as the policy ideas that are currently being debated in Lansing.

The Flat World

The title of this report is "A New Agenda for a New Michigan." In many ways it is the latter concept—the need for a new Michigan—that is most important. Unless our actions are grounded in the realities of the emerging global economy, there is little chance Michigan will get on a path that leads to a prosperous Michigan.

Two mega forces—technology and globalization—are driving a fundamental transformation of the economy. The changes we are going through are as basic and dislocating as the change when we left farms and craft production to move to cities and mass production factories a century ago.

New York Times columnist Thomas Friedman has labeled this new era the "flat world." Flat because, increasingly, work can be done anywhere on the planet. The flat world is restructuring economic possibilities across the globe. In advanced economies, like the United States, work—particularly higher-wage jobs—increasingly involves knowledge, creativity, and innovation. Many routine/repetitive functions can be done by machines or lower-wage workers in developing countries.

As we will explore later, knowledge-based industries—where work is done in offices, schools, and hospitals—now account for 43% of American jobs and have increased in employment by 32% since 1990. Manufacturing—work done in factories—by contrast, now accounts for a little more than 10% of American jobs and has suffered employment declines of 19% since 1990. It is clear that American economic success in a flat world will be driven by knowledge-based enterprises.

Along with the transition to a knowledge-driven economy, the other major feature of the flat world economy is constant change. Globalization and digital technologies have led to big changes in the economy. There is far more to come!

We are at the early stages of globalization and technology-driven change. It is inevitable that an ever-increasing number of residents of developing nations like China and India will migrate from competing with us mainly in low-skill jobs to being competitive in high-skill industries and jobs. It is also inevitable that technology (information, bio, and nano) will allow advanced machines to do more of the work that humans now do as well as enable the creation of whole new products and industries that will reduce, if not eliminate, demand for some of today's goods and services.

This all adds up to a world where the gales of creative destruction blow stronger and faster. The forces of trade and technology are so powerful that competitive advantage can disappear rapidly. For enterprises, the key to success, in all industries, will be innovation. Leading-edge enterprises—whether in well-established industries such as our motor vehicle and office furniture mainstays, or in emerging sectors,

such as information technology and the life sciences—will be those that are constantly conceiving, designing, and commercializing new products and services.

These same forces also make the path to success more unpredictable for workers. For almost all of us, the unpleasant new reality is that the enterprise you work for, the job you have, and even your occupation, offer less security than ever before.

People will do well based on their ability to be continuous learners. Past guarantors of a good income—your college degree, seniority, unions, etc.—are of declining value. The only reliable employment security you will have is your current skills compared with those around the globe competing for the same job.

It is also clear in a world of constant change that states and communities can no longer assume that their most important enterprises will be permanent mainstays. In a global economy increasingly characterized by rapid and discontinuous change, successful individuals, enterprises, and communities will need to be agile: able to let go of what is no longer working and embrace—or better yet, create—the next wave.

This, of course, is the role Michigan played at the beginning of the Industrial Age. Because we embraced the new—and left behind the old—quicker than anyone else, we became one of the leading-edge communities in the world for the first half of the twentieth century.

Once again, success is tied to letting go of the old and embracing the new. But embracing a profound transition seems to be particularly difficult for Michigan. We seem to be having trouble even having a public conversation about what a successful New Economy Michigan might look like. Our civic agenda seems to be dominated far more by efforts to preserve our Industrial Age legacies, rather than embracing the future.

But change we must. The long-term trends have lasted so long and Michigan's decline, compared with the nation, is so steep that it is unrealistic to think that incremental changes can reposition Michigan as a leading-edge community. Michigan needs to get on a new path if we are to succeed in the knowledge-driven and entrepreneurial economy of the future.

We are not naive. We know that, just as in the Industrial Age, not all of us will be economic winners. We understand that for many Michiganians the transition to a flat world means a reduction in their standard of living. Some will lose their job. Others, who keep their job, will see their wages reduced. Some who lose their job will have a hard time finding a new job, and many will only find new jobs that pay less. A lot of us will have our employer provided health care reduced or eliminated. Most of us will have less job security.

But the flat world is a reality. The forces of technology and globalization trump policy and politics. State and local policy makers have no levers to shape the flat world. At the national level, policy makers have levers (principally trade and currency policy) that can tilt the playing field more to America's advantage, but they cannot stop the transition to the flat world.

Rather than trying to resist, our preference would be to focus policy on providing Americans with the resources that would greatly enhance their chances to succeed in the flat world. At the top of our list would be a national system that provides universal access to lifelong learning, along with a national commitment to substantial federal funding for new knowledge creation (basic research) so as to continue America's leadership as the place where what comes next is invented.

Our Goal: A High-Prosperity Michigan

Let's turn our attention to how to revive the Michigan economy in the context of the flat world.

We started with the question, "Where do we want to go from here?" Our answer: a high-prosperity Michigan. This is best measured by a per capita income above the national average no matter how well the national economy is faring. This is a status we enjoyed for most of the first 70 years of the past century. After more than three decades of continuous decline compared with the nation, we are now consistently below the national average in both upturns and downturns.

We use per capita income as our metric of economic well-being because it is the most comprehensive and reliable estimate of income of a community's residents. It includes all wage, dividend, self-employment, and interest income as well as transfer payments. It also includes employer and government payments for health care and retirement. It does **not** include capital gains. (The data are compiled by the U.S. Department of Commerce, Bureau of Economic Analysis.)

We found that the only reliable path to a high-prosperity Michigan is to be concentrated in knowledge-based enterprises. There is a clear pattern across the country that the states, and particularly metropolitan areas, with the most successful economies are those that are concentrated in high-pay, knowledge-based industries.

States and metropolitan areas concentrated in manufacturing or natural resource-based industries will almost surely not be high-prosperity communities. In the past, Michigan was able to flourish with an economic base concentrated in factories, farming, and tourism. No more. In a flat world, these functions increasingly are either being done by advanced machines or being transferred overseas, or they are lower-wage industries. They will continue to be important parts of the Michigan economy, but they are not where high-wage employment growth will come from.

Before we explore data, we should define what we mean by manufacturing. In our conversations about the manufacturing industry we tend to use two definitions, one related specifically to factory work, the other to all aspects of a goods-producing company. For this report, manufacturing refers specifically to work done in factories, making products. This is the definition of manufacturing in the nation's new industrial classification system.

Workers in management as well as pre- and post-production occupations in such important Michigan industries as motor vehicles, office furniture, chemicals, and pharmaceuticals are no longer considered part of the manufacturing industry. They are now accounted for in the knowledge-based industries, primarily in management of companies and professional and technical services. In fact, the knowledge parts of these industries—particularly motor vehicles—are the core of the knowledge economy in Michigan today. They are major assets in our future growth.

In Table 1 we compare employment growth by industry for Michigan and the nation. We use 1990 as our base year because we want to explore long term structural—rather than cyclical—trends.

Perhaps most surprising, Table 1 shows that Michigan's slower job growth is not caused by the loss of manufacturing jobs. The entire country is losing manufacturing jobs. Since 1990, manufacturing employment has declined both nationally and in Michigan by around 19%.

It is in the nonmanufacturing industries that Michigan is lagging the nation, especially in the dynamic, middle- and high-wage knowledge-based industries. These industries now account nationally for 43% of all jobs. They have seen employment growth nationally of nearly 32% compared with 17% in Michigan. If Michigan's knowledge-based industries had grown at the same rate as the country, there would be 223,000 more Michiganians working today in this growing, good-paying sector of the economy.

In Table 2 we focus on the industries that we believe best explain why Michigan's economy is lagging the nation: motor vehicle and parts manufacturing; other manufacturing, and high-pay, knowledge-based services. The latter include the industries with the highest average pay nationally: information, finance and insurance, professional and technical services, and management of companies. In addition to high pay, companies in these industries compete in global markets and require many high-skilled workers. These are the industries that we believe are the major growth engines of the post-industrial economy.

Table 2 includes data on location quotients. The location quotient is a measure of the concentration of an industry in a community as compared with its concentration in the United States. A location quotient of one means that the industry claims an equal share of employment locally as nationally. More than one means a higher share and less than one means a lower share.

Table 1. A Comparison of Job Growth in Michigan and the United States, 1990–2005, by Industry Category

Industry	Avg. Annual Pay 2004		Michigan Employment		U.S. Employment		% Change 1990–2005	
	Michigan	U.S.	1990	2005	1990	2005	Michigan	U.S.
Total nonfarm wage & salary	**$40,373**	**$39,354**	**3,969,700**	**4,384,000**	**109,487,000**	**133,463,000**	**10.4%**	**21.9%**
Middle- & high-pay, low-education			**1,315,600**	**1,231,200**	**34,757,000**	**34,852,800**	**–6.4%**	**0.3%**
Manufacturing	$56,073	$47,861	837,600	678,800	17,695,000	14,232,000	–19.0%	–19.6%
Mining	$50,683	$66,632	9,700	6,700	680,100	560,700	–30.9%	–17.6%
Construction	$43,733	$40,521	143,100	191,400	5,263,000	7,277,000	33.8%	38.3%
Utilities	$73,125	$72,403	28,100	20,600	740,000	557,600	–26.7%	–24.6%
Transportation & warehousing	$44,537	$38,834	89,200	107,300	3,475,600	4,346,700	20.3%	25.1%
Wholesale trade	$55,804	$53,310	159,500	170,300	5,268,400	5,749,500	6.8%	9.1%
Real estate & rental & leasing	$30,011	$37,304	48,400	56,100	1,634,900	2,129,300	15.9%	30.2%
Middle- & high-pay, high-education			**1,524,300**	**1,783,000**	**43,289,500**	**56,987,400**	**17.0%**	**31.6%**
Information	$51,419	$60,722	70,800	67,500	2,688,000	3,066,000	–4.7%	14.1%
Finance & Insurance	$52,760	$70,129	147,000	162,400	4,978,600	6,012,000	10.5%	20.8%
Professional & technical services	$64,847	$62,547	201,000	246,400	4,556,700	7,013,000	22.6%	53.9%
Management of companies	$91,847	$80,054	59,900	64,600	1,667,400	1,751,600	7.8%	5.0%
Education (private & government)	$37,421	$35,949	360,900	436,800	9,320,000	12,932,700	21.0%	38.8%
Health care & social assistance	$37,171	$36,712	370,500	493,300	9,295,800	14,522,900	33.1%	56.2%
Government except education	$41,522	$44,118	314,200	312,000	10,783,000	11,689,200	–0.7%	8.4%
Low-pay, Low-education			**1,129,800**	**1,370,000**	**31,440,500**	**41,624,200**	**21.3%**	**32.4%**
Natural Resources (forestry & fishing)	$27,680	$32,359	1,800	1,700	84,900	64,300	–5.6%	–24.3%
Retail trade	$23,561	$24,415	505,600	505,700	13,182,300	15,254,900	0.0%	15.7%
Employment services	$28,113	$23,533	57,300	156,000	1,493,700	3,575,300	172.3%	139.4%
Other administrative support, waste	$31,605	$30,070	89,900	123,400	3,130,600	4,541,700	37.3%	45.1%
Arts, entertainment & recreation	$24,505	$27,607	39,300	62,900	1,132,000	1,890,700	60.1%	67.0%
Accommodations & food service	$12,235	$14,707	292,300	341,800	8,156,000	10,911,300	16.9%	33.8%
Other services	$24,882	$25,152	143,600	178,500	4,261,000	5,386,000	24.3%	26.4%

Source: Bureau of Labor Statistics, Current Employment Statistics, May 2006, and Covered Employment and Wages series. Classification by wage rate and educational attainment by authors.

Table 2. Employment in Motor Vehicles and Parts Manufacturing, Other Manufacturing, and High-Pay, Knowledge-Based Services (NAICS 51, 52, 54, 55), Michigan and Balance of U.S., 1990 and 2005

	Employment 1990		Employment 2005		Change 1990-2005		Location Quotient	Average Wage 2004	
	Balance of U.S.	Michigan	Balance of U.S.	Michigan	Balance of U.S.	Michigan	Michigan 2005	Balance of U.S.	Michigan
Total employment	105,517,300	3,969,700	129,079,000	4,384,000	22.3%	10.4%	1.000	$39,319	$40,373
Autos, light trucks, & parts	636,200	288,200	703,600	224,100	10.6%	–22.2%	7.354	$52,452	$70,260
Mfg. except autos & parts	16,221,200	549,400	12,849,600	454,700	–20.8%	–17.2%	1.040	$47,231	$48,634
High-pay, knowledge-based svcs.	13,412,000	478,700	17,301,700	540,900	29.0%	13.0%	0.923	$66,219	$62,747

Source: Bureau of Labor Statistics, Current Employment Statistics, May 2006, and Covered Employment and Wages series. Definition of high-pay, knowledge-based service industries by authors.

As the data clearly indicate, what distinguishes Michigan most from successful state and regional economies is its astonishingly high concentration in one industry: motor vehicles and parts manufacturing. Non-automotive manufacturing in Michigan is basically in line with the nation. So it is the domestic automotive manufacturing industry—an industry that is in deep trouble today—that is the primary reason Michigan's economy lags the nation today.

This is not unique to Michigan. State and regional economies either lead or lag the nation in large part dependent on how well their dominant industries are performing. Consider, for instance, Colorado and Texas in the energy downturn in the eighties and California in the defense industry downturn in the early nineties. So it is industry mix, not state and local policies, that best explains relative performance.

Maybe most worrisome is the wage premium of nearly $18,000 that Michigan motor vehicle and parts manufacturing workers enjoy today compared with their counterparts in the rest of the nation. In a highly competitive global economy, this wage premium is not sustainable.

Not only are automotive sector wages here substantially higher than in the industry nationally, but they also are more than $7,000 higher than the average wage in Michigan's high-pay, knowledge-based industries. In the rest of the country, automotive sector manufacturing workers earn nearly $14,000 less than workers in high-pay, knowledge-based industries. This is an impediment for Michigan in making the necessary transition to a knowledge-driven and entrepreneurial economy.

The combination of being (1) under-concentrated and growing less than half as fast as the nation in high-pay, knowledge-based industries, and (2) highly dependent on the now uncompetitive domestic auto industry, means that Michigan almost surely will continue to lag the nation for the next several years.

Characteristics of High Prosperity Communities

Economies are regional. States and municipalities are political jurisdictions, they are not economic units. State economies can best be understood as the sum of their regional economies.

That economies are regional can be best seen by looking at the wide variation in economic success of metropolitan areas within the same state (and some that actually spill over into surrounding states). Almost all states are characterized by regions that are doing well economically and those that aren't. Regions within states also tend to have widely different sector concentrations.

What distinguishes prosperous regions from those that aren't is what they sell to outsiders, largely what they export (but also including tourists, retirees, students, and medical patients who come from elsewhere and buy goods and services in a region).

So when it comes to economic growth, all enterprises are not equal. Those businesses that produce goods and services for the national, or better yet global, marketplace are the ones that bring wealth into the region. Thus, export-oriented businesses generate income that increases revenue to those enterprises that serve local needs.

Table 3 presents data on the top ten metropolitan areas in the country with a population of at least one million, as well as metropolitan Detroit and Grand Rapids. (The data we collected on all metropolitan areas with a population of one million or more is in Appendix A.)

The data clearly show that high-prosperity metropolitan areas are characterized by high concentrations in high-pay, knowledge-based industries as well as a high proportion of adults with four-year degrees. All of the top ten are above—many substantially above—the national average in both metrics. Simply put, they are further along in the transition to a post-industrial economy than Michigan's largest regions.

On a more positive note, although lagging the leading-edge metropolitan areas, the nine-county Detroit region has performed reasonably well. Despite our economic troubles, the region ranks 14th out of 54 regions with a population of one million or more in per capita income. In addition, metropolitan Detroit has experienced above-average per capita income growth since 1990 and is about at the national average in share of employment earnings from high-pay, knowledge-based industries. On the other hand, the seven-country Grand Rapids region is lagging the nation's large metropolitan areas on all metrics. Maybe most worrisome is its dramatic under-concentration in high-pay, knowledge-based industries.

Table 3: Metro Areas with Population over 1 million and Highest Personal Income Per Capita in 2004; plus Detroit and Grand Rapids

Area	Population 2004	Personal Income Per Capita 2004	Growth in Personal Income 1990–2004	Share of Earnings 2004		Population Aged 25 or More Bachelor's or More
				Manufacturing	High-Pay, Knowledge-Based Industries	
United States	**293,656,842**	**$33,050**	**69.7%**	**12.9%**	**22.4%**	**24.4%**
San Jose-San Francisco-Oakland, CA (CSA)	7,148,000	$46,926	81.7%	15.1%	31.7%	37.3%
Washington-Baltimore-Northern Virginia, DC-MD-VA-WV (CSA)	8,050,560	$43,664	76.2%	3.9%	29.7%	37.1%
Boston-Worcester-Manchester, MA-NH (CSA)	5,802,063	$43,664	83.7%	12.0%	32.2%	34.4%
New York-Newark-Bridgeport, NY-NJ-CT-PA (CSA)	21,899,042	$43,428	65.2%	7.3%	37.6%	30.5%
Denver-Aurora-Boulder, CO (CSA)	2,605,861	$41,229	88.6%	7.9%	32.6%	35.5%
Seattle-Tacoma-Olympia, WA (CSA)	3,766.678	$40,081	82.9%	12.0%	25.7%	32.0%
Hartford-West Hartford-Willimantic, CT (CSA)	1,297,440	$39,918	61.8%	15.4%	29.9%	29.8%
Minneapolis-St. Paul-St. Cloud, MN-WI (CSA)	3,434,066	$39,796	80.2%	15.2%	27.0%	33.3%
Philadelphia-Camden-Vineland, PA-NJ-DE-MD (CSA)	5,949,976	$38,475	72.8%	11.6%	26.9%	26.9%
San Diego-Carlsbad-San Marcos, CA (MSA)	2,935,190	$37,965	82.1%	9.9%	24.1%	29.5%
Detroit-Warren-Flint, MI (CSA)	5,424,253	$35,955	71.2%	21.6%	22.8%	23.7%
Grand Rapids-Wyoming-Holland, MI (CSA)	1,305,498	$29,546	67.5%	29.5%	13.6%	22.9%

Note: Data on educational attainment are from the 2000 Census, and use the 1990s metro area definitions. The income and earnings data are from the Bureau of Economic Analysis (REIS), May 2006, and include all income, including self-employment income.

In a flat world where more and more work can be anyplace, many have predicted an economic resurgence in smaller metropolitan areas and even rural areas. The pattern as shown in Table 4 is the opposite: big metropolitan areas are where high-pay, knowledge-based industries and knowledge workers are concentrating.

Table 4: Economic Performance by Size of Metropolitan Area (Metrics are unweighted averages for size category)

Area Name	Population 2004	Personal Income Per Capita 2004	Personal Income Per Capita Growth 1990–2004	Share of Earnings 2004 Manufacturing	Share of Earnings 2004 High-Pay, Knowledge-Based Industries	Population Aged 25 or More Bachelor's or More
United States	**293,656,842**	**$33,050**	**69.7%**	**12.93%**	**22.41%**	**24.4%**
Metro areas with a population of:						
6,000,000 or more	12,837,823	$40,843	68.3%	10.33%	30.51%	31.6%
3,000,000 to 6,000,000	4,977,292	$36,827	72.8%	12.40%	24.83%	28.5%
2,000,000 to 3,000,000	2,477,279	$34,708	73.1%	12.84%	23.20%	26.5%
1,500,000 to 2,000,000	1,784,517	$32,410	74.6%	11.74%	20.39%	24.7%
1,000,000 to 1,500,000	1,257,230	$31,752	69.7%	15.59%	18.65%	25.5%
500,000 to 1,000,000	656,083	$29,556	68.4%	13.59%	15.85%	23.6%

Note: Data on educational attainment are from the 2000 Census, and use the 1990s metro area definitions. The income and earnings data are from the Bureau of Economic Analysis (REIS), May 2006, and include all income, including self-employment income.

So metropolitan Detroit, and to a lesser degree, metropolitan Grand Rapids, are highly likely to be the main drivers of a prosperous Michigan. In fact, it is hard to imagine a high-prosperity Michigan without an even higher-prosperity metropolitan Detroit.

We wanted to learn more about what the economies of successful metropolitan areas look like. We decided that the most relevant regions for Michigan were those in the nation's heartland. So we collected detailed information by industry for metropolitan Minneapolis and Chicago to compare with metropolitan Detroit. We chose metropolitan Omaha, because its population is smaller, to compare with metropolitan Grand Rapids. Metropolitan Omaha, with a population of a little more than 800,000, has a strong economy with a per capita income of $35,798, and as we will see, a high concentration in high-pay, knowledge-based industries. (The employment by industry data we collected for the five regions and Michigan are presented in Appendix B. Location quotient data is in Appendix C.)

In Table 5 we present data on our key export-based industries for each of the five metropolitan areas. Once again we see the heavy dependence on automotive vehicle and parts manufacturing in both of Michigan's largest regions. For metropolitan Grand Rapids, that extends to other manufacturing as well.

Table 5: Location Quotients for Key Export-Oriented Industries in Selected Metro Areas, 2004

	Location Quotients, 2004				
	Detroit	Chicago	Minneapolis	Grand Rapids	Omaha
Automobile, light truck, & parts mfg.	9.65	0.59	0.22	6.04	0.06
Manufacturing except autos & parts	0.76	1.11	1.22	1.85	0.79
High-pay, knowledge-based services	1.14	1.21	1.28	0.69	1.27
Information	0.74	1.09	1.05	0.56	1.24
Finance and insurance	0.85	1.27	1.36	0.75	1.52
Professional and technical services	1.46	1.23	1.02	0.63	0.94
Management of companies	1.58	1.19	2.44	0.91	1.87

Source: Bureau of Labor Statistics, Covered Employment and Wages series. Includes both private and government employment, missing data estimated by authors.

What characterizes each of our three comparison regions is their concentration in all four of our high-pay, knowledge-based industries. They are broadly diversified across the knowledge part of the economy. In fact, the industry detail in Appendix C reveals that they are diversified across a broad range of industries.

The Appendix C data also show that our three successful heartland regions are, by and large, not concentrated in enterprises commercializing new technologies. Enterprises commercializing new technologies are vitally important to the nation's competitiveness, but they are not necessarily the key to a region's success.

A declining middle class?

There is great concern that the trends we have explored suggest that the days of a mass middle class in America are coming to an end. That concern is particularly strong here, where so many in our middle class have been high-paid factory workers.

There is a widespread belief that those who own or lead enterprises, the most talented athletes and entertainers, and those with advanced degrees will be the winners, while the rest of us see a declining standard of living.

To us, far more likely is a change in the nature of good-paying jobs, not their decline. In a knowledge-based economy, middle-class employment in the future will come primarily in the high-skilled industries of Table 1. These industries—where work is done in offices, schools, and hospitals—will continue to grow and provide lots of good-paying career opportunities.

Clearly, many of these jobs require a four-year degree or more. A four-year degree—even better, an advanced degree—is the most reliable path to a good-paying career. But lots of jobs that pay well will remain for those without a four-year degree.

There will continue to be good-paying job opportunities for skilled front-line workers in construction, transportation, utilities and, yes, manufacturing. (A reasonable projection is that a decade from now, factory workers will make up about 10% of the Michigan workforce.) What is likely true for all these traditional good-paying occupations is that skill requirements will go up and the top pay—particularly for unionized workers—will be lower.

There also will be a growing demand for skilled technicians in many of the knowledge-based industries—particularly health care and information. You can best see the great variety of good-paying occupations for those without a four-year degree at our community colleges and universities that offer both two- and four-year degrees. They offer certificates and two-year degrees in hundreds of occupations. As the economy evolves, they will offer other such programs in occupations that we can't even imagine today.

This is consistent with America's past. As the American economy has evolved, the nature of good-paying work has changed. But the pattern is that as we get more productive, our per capita income goes up.

As the Federal Reserve Bank of Dallas wrote in its 2003 annual report (available at http://www.dallasfed.org/fed/annual/2003/ar03.pdf):

The work we do has evolved in response to economic progress. Advances in technology create tools capable of doing tasks better or cheaper than human beings. As machines make some talents obsolete, people move on to jobs that use others. In this way, workers move upward over time to jobs demanding more sophisticated talents. In the past decade, the United States saw employment declines in jobs requiring muscle power, manual dexterity and formulaic intelligence. The nation has added jobs that use analytic reasoning, imagination and creativity, and people skills.

Our conclusion: There will be lots of good-paying jobs in the future. To take advantage of those employment opportunities we will need to be agile and continuous learners. But if we are, we will enjoy a rising standard of living.

Let's now explore how Michigan becomes a place with lots of these good-paying career opportunities.

II. A New Agenda

Talent Matters Most

We set out to answer the question, "What really matters in better positioning Michigan and its regions for success in a knowledge-driven and entrepreneurial economy?" Our answer: Talent!

What most distinguishes successful areas from Michigan is their concentrations of talent, where talent is defined as a combination of knowledge, creativity, and entrepreneurship. Quite simply, in a knowledge-driven and entrepreneurial economy, the places with the greatest concentrations of talent win. Regions without concentrations of talent will have great difficulty retaining or attracting knowledge-based enterprises, nor are they likely to be where new knowledge-based enterprises are created.

Rich Karlgaard, publisher of Forbes magazine, summed it up best:

Best place to make a future Forbes 400 fortune? Start with this proposition: The most valuable natural resource in the 21st century is brains. Smart people tend to be mobile. Watch where they go! Because where they go, robust economic activity will follow.

Where talent chooses to live will have a huge impact on regional economies. This is an area where Michigan is struggling. The Census Bureau reports that in 2004, of adults 25 years and over, 24.6% of Michiganians have a four-year degree or more compared with 27.0% nationally. We rank 31st.

Maybe more worrisome, the Census Bureau also reports that between 1995 and 2000, Michigan had the third-largest outmigration of the young, single, and college-educated (ahead of only Pennsylvania and Ohio). And this is the period in which Michigan had its strongest economy in the post-war era and one of the lowest unemployment rates in the nation.

So in a flat world, economic development priority 1 is to prepare, retain and attract talent. This new focus on talent requires a rethinking of our entire strategy for growing the Michigan economy.

First we need to learn far more about why talented people choose to live in Michigan or not. Universities should collect and share information about where their graduates choose to locate after graduation and why. It would be very helpful if employers who recruit talent nationally or internationally would do the same.

We now turn to our ideas on a new agenda: the priority actions we believe can best position Michigan to succeed in the context of a flat world.

Our goal is to (1) identify those action items we believe will have the greatest impact on recreating a high-prosperity Michigan, and (2) lay out a framework for action, not the details. More than anything else we want to begin a new public conversation in Michigan about how we can revive the Michigan economy, a conversation that is centered on preparing, retaining, and attracting talent.

Strategic Priority 1: Build a culture aligned with the flat world.

We have come to believe that culture trumps policy. What most underpins economically successful regions is their culture, not state and local policy. What matters most is the attitudes and beliefs of citizens about how to get ahead in a world of constant change.

Our expectations about the economy and how one constructs a good-paying career are a big driver of how successful we will be in the future. The stories we tell each other, and most important, our children, about how to do well economically matter because they guide action. We need today's stories to be aligned with the realities of the flat world.

Long-standing Michigan beliefs about the economy are now impediments to our future success. We operate against a substantial headwind unless we change our expectations about (1) the ability to get a good job without post-secondary education and (2) being entitled to a secure job with good pay and benefits, as long as you do a good job, whether your employer is successful or not.

In a world where economic growth is driven by knowledge and innovation, the most successful regions will be those which highly value learning, an entrepreneurial spirit, and being welcoming to all. The evidence is that Michigan is having trouble with all three.

Learning

The evidence is clear: the most reliable path to economic success is post-secondary education. Those with at least a four-year degree are earning a higher premium today than ever before. As we have seen, there are now, and will be in the future, good-paying jobs that don't require a four-year degree. But most will require, at a minimum, the equivalent of a community college occupational certificate or two-year degree.

Add to that the increased need to constantly learn new skills in a world characterized by accelerating creative destruction of both jobs and enterprises. This means that instilling the love of learning may well be the most important foundation for economic success.

But there is disturbing polling data suggesting that too many Michigan parents believe that post-secondary education is not a top priority. For many Michigan households that worked in the past, so valuing learning wasn't an economic necessity. No longer!

Entrepreneurial spirit

This is more than starting a business, although we need far more of that. It is a community that stops thinking of employment as a long-term entitlement to a good job. Rather, it is a community that celebrates an entrepreneurial mindset characterized by a driving ambition to create one's own successful career; a willingness to take risks; and an unyielding pursuit of opportunity, possibility, and hope.

At the turn of the last century, Michigan was a hothouse of entrepreneurship. New enterprises that grew to be great were started not just in autos, but also in cereal, furniture, pharmaceuticals, and chemicals. We were the place where the new was being invented. That burst of entrepreneurship propelled us to be one of the most prosperous communities on the planet.

There is a real concern that an entrepreneurial spirit is no longer a major component of the Michigan DNA, that far too many of us have come to believe that the best path to prosperity is by working in a stable job for a large enterprise. Too many of the most talented Michiganians (at least those who choose to live here) prefer a high-paid job with an established enterprise to the possibilities of getting in on the ground floor of potentially new, great enterprises.

Most of us will never start a new business, but increasingly we all need to be more entrepreneurial. In a world of less secure jobs, we will not be well served if we believe that there is an entitlement to a good-paying job.

The belief in an employment entitlement seems to run deepest amongst Michigan's many unionized workers. That belief is now an impediment to economic growth. In a flat world, employment entitlement is gone. Today's reality is that one's job is dependent on whether the enterprise you work for is successful. If your employer isn't meeting the needs of customers better than its competitors, workers will lose their jobs. And compensation is going to be set largely in the global marketplace, not at the bargaining table.

In a flat world, successful careers are going to be much more ad hoc and nonlinear—requiring agility and resourcefulness. We still describe career progression as climbing a ladder, the notion being that there are known, linear steps that one takes to get increasingly better-paid work. This is increasingly the wrong story.

Rather than ladder climbing, the way to get ahead in the future is going to look a lot more like rock climbing. Rock climbing because successful careers are going to require the ability to constantly spot opportunities and challenges and the ability to figure out how to make those opportunities and challenges

work to your advantage. For most of us, there will no longer be a straight line up to a promotion. Rather, we will have to be able to move sideways, sometimes down, in order to advance.

Being welcoming to all

The places that do the best in attracting talent from anywhere on the planet win. As Forbes magazine's Rick Karlgaard noted, where smart people choose to live, robust economic activity will follow.

Regions need to embrace everyone. We need to be welcoming to immigrants, people from all religions, races, and ethnic groups and varied lifestyles. Leading-edge metropolitan areas are a tapestry of people from all backgrounds. Tolerant attitudes and great diversity characterize successful regions across the country.

Unfortunately in Michigan, we have a long way to go. As a state we remain one of the most segregated in the country. Racial and ethnic conflicts among all groups are way too prevalent. When it comes to immigration, we are, at best, ambivalent.

Most enduringly, black/white differences are a major barrier to making progress on a whole range of important issues, particularly in southeast Michigan. In both Detroit and its suburbs, too many politicians have found a formula for success is to play the race card.

This needs to change. We need to develop a culture that unambiguously celebrates diversity and nurtures tolerance. This means both building a culture that condemns rather than tolerates discrimination and segregation, as well as welcoming, with open arms, talented people from outside Michigan.

Leading an economic growth agenda with an emphasis on culture is just as new to us as it probably is to you. It is not where we expected to end up when we began this project. So all of us together will have to learn how communities can change culture.

What we know is that delivering a consistent, unambiguous message is important, as we have with smoking, drunk driving, and seat belt usage. At the very least, we need to implement a long-term campaign that regularly communicates the values of learning, an entrepreneurial spirit, and being welcoming to all.

Another catalyst for cultural change appears to be folks moving into a community from outside. Those from elsewhere bring with them different experiences and cultures. They also have no memory of old fights that far too often get in the way of progress. As they settle into their new communities they infuse into the local culture differing perspectives. There is every reason to believe that most newcomers to Michigan will reinforce the values of learning, an entrepreneurial spirit, and being welcoming to all.

Let's turn our attention to public policy. We can't emphasize enough that if you get state and local policy right, but don't have a culture aligned with a knowledge-driven economy, Michigan will continue to lag the nation.

The instinct of many readers will be to emphasize what policy makers need to do to improve our economy. But our research has led us to conclude that state and local policy is not nearly as important in determining economic success as advocates from across the political spectrum believe. Far more important—now and increasingly in the future—is the talent and entrepreneurship of people and the inventiveness of export-based enterprises in each metropolitan area.

As we mentioned earlier, much of our research has been focused on answering the question of what distinguishes successful metropolitan areas from us. Somewhat surprisingly, we found an absence of clear patterns in the kind of policies or civic initiatives that distinguish successful regions from Michigan. What distinguishes them from us is predominantly (1) industry mix (more concentrated in knowledge-based industries) and (2) a higher proportion of adults with four-year degrees or more.

That said, there is a policy agenda we think can help better position Michigan and its regions to succeed in a knowledge-driven economy. Maybe most important is to resist the pressure to try to save jobs and enterprises that are no longer competitive. Such efforts are tilting at windmills (they won't work) and, most important, they take time, energy, and resources away from doing what is needed to succeed in the flat world.

The role of taxes

For the past dozen years, Michigan has centered its economic development strategy on cutting taxes. The tax cuts of the past dozen years successfully moved Michigan from higher to lower tax burdens than the national average. But, contrary to the promises of the tax cutters, lower taxes have been accompanied by economic growth slower than the nation.

In 2002 the Michigan Chamber of Commerce (through its foundation) published a report that compared Michigan's taxes with those of the other states. Using 1999 data, the study showed that Michigan taxes were above the national average. We find it to be a high quality and objective study. (The report can be found at http://www.michamber.com/nr/studies/TaxClimate.pdf)

They measured combined state and local taxes on three metrics: taxes per capita, taxes as a percentage of personal income, and taxes per worker. We agree with them that combined state and local taxes are the best measure of a state's tax burden. It is the only way to do an apples-to-apples comparison given the large differences among states on the division of funding responsibility between the state and local units

of government. In Michigan's case, it is the only way to compare taxes pre- and post-Proposal A, when we dramatically changed funding responsibilities.

In Appendix D we provide the results of our update of the Chamber study using the same methodology. We have added economic performance data for each of the states to the tax data. We use 1993 as our base year because it is the year prior to Proposal A, which is the start of the era of tax cutting for economic development in Michigan. We use 2002 tax data because they are the latest available. Given that Michigan, almost alone amongst the states, has continued to cut its major taxes, we are confident that when the 2004 data are released our conclusions will remain the same.

Table 6 shows that Michigan is now below the national average on all three metrics. The tax cuts were successful in bringing Michigan's tax burden from above to below the national average. But Table 7 shows that the tax cuts did not work as an economic development strategy. Moving from above the national average to below has been accompanied by economic growth substantially slower than the nation.

Table 6: Comparison of Tax Burden Per Capita, Per Employee, and as a Percentage of Personal Income

	2002	1993	Change 1993 to 2002	Rank 2002
Taxes per capita				
United States	$3,142	$2,286	NA	NA
Michigan	–$90	+$61	–7.41%	23
Taxes per employed resident				
United States	$6,631	$4,942	NA	NA
Michigan	–$157	+$190	–8.02%	18
Taxes as a percentage of personal income				
United States	10.20%	10.71%	NA	NA
Michigan	–0.10%	+0.40%	–0.50%	26

Source: Michigan Future Inc., using data from the Census Bureau, the U.S. Department of Labor, and the Bureau of Economic Analysis.

Table 7: Comparison of the Economic Performance of Michigan and the United States

	Per Capita Personal Income			Residents Employed		Share of Gross State Product High-Pay, Knowledge-Based Industries		Population Aged 25 or More Bachelor's or More	
		Change Compared with U.S.		Change Compared with U.S.					
	2005	1993 to 2005	Rank	1993 to 2005	Rank	2004	Rank	2004	Rank
United States	$34,586	NA	NA	17.85%	NA	21.65%	NA	27.0%	NA
Michigan	$33,116	–5.29%	46	–8.93%	44	18.91%	25	24.6%	31

Source: Michigan Future Inc. using U.S. Department of Labor, Bureau of Economic Analysis, and Census Bureau data.

There is no evidence that tax cutting will ever work as an economic growth strategy. As you can see in Table 8, we found that the states that are above the national average in both per capita income and share of employment earnings from high-pay, knowledge-based industries are not characterized by low taxes. If anything they tend to be more high-tax than low.

In Table 9 we present data for the six states that are in the bottom ten on each of the three tax metrics. The data show that the states with the lowest taxes are almost all below the national average in per capita income; share of employment earnings from high-pay, knowledge-based industries; and proportion of adults with a four-year degree or more. They are not now—and are highly unlikely to be in the future—high-prosperity states.

In a recent presentation to the National Conference of State Legislatures, Microsoft Chairman Bill Gates made the essential point that in a knowledge economy, state and local taxes do not drive growth:

The industries that I think about the most, information technology and biological industries, they are far more sensitive to the quality of talent in a location than they are to the tax policies. If you say, okay, where in the United States did jobs around information technology grow up disproportionately, well, California would be number one, and not because they have the most friendly tax policies compared to other states. This state [Washington] would be strong, Microsoft distorted that a little bit, but again it wasn't based on any particular tax policy. And so those things, you can go overboard on those things.

(The Gates NCSL presentation is available at: http://www.microsoft.com/billgates/speeches/2005/08-17ncsl.asp)

Everyone would like Mississippi's taxes and Minnesota's economy. Unfortunately, there is no state in the nation that has both. So if we want to reach our goal of being a high-prosperity state, we need a new policy agenda, one that is centered on key public investments that are aimed at preparing, retaining, and attracting talent.

We investigated state and local spending, just as we did taxes. The data are 2002 Census Bureau data as well. Once again we found the absence of a consistent pattern in spending among high-prosperity states. In fact, when it comes to state and local policies that advocates on all sides of the political spectrum claim are key to economic growth, we found far more variation than commonality among the leading-edge states.

So, rather than lessons learned from successful states, in constructing our policy recommendations we have been guided most by our insights and experiences on what assets we have to build from and what actions will have the greatest impact on our goal of preparing, retaining, and attracting talent.

Table 8: Comparison of Michigan and the United States with the Leading New Information Economy States

	Per Capita Personal Income		Share of Gross State Product High-Pay, Knowledge-Based Industries	Population Aged 25 or More with Bachelor's Degree or More	State & Local Taxes Compared with U.S. Average		
	Dollars 2005	Change compared with U.S. 1993 to 2005, %	2004, percent	2004, Percent	Per Capita 2002	Per Employed 2002	%, Personal Income 2002
United States	**$34,586**	**NA**	**21.65%**	**27.0%**	**$3,142**	**$6,631**	**10.199%**
Michigan	**$33,116**	**-5.29%**	**18.91%**	**24.6%**	**-$90**	**-$157**	**-0.101%**
District of Columbia	$54,985	+21.28%	32.73%	47.7%	+$2,574	+$4,915	+2.319%
Connecticut	$47,819	+3.01%	31.05%	34.6%	+$1,231	+$2,239	+0.090%
Massachusetts	$44,289	+13.89%	28.58%	37.4%	+$584	+$739	-0.639%
New Jersey	$43,771	+1.15%	23.23%	33.3%	+$895	+$1,791	+0.076%
New York	$40,507	-0.92%	34.72%	30.5%	+$1,495	+$3,536	+2.917%
Virginia	$38,390	+8.82%	24.85%	32.7%	-$105	-$462	-0.998%
Colorado	$37,946	+10.03%	25.55%	33.7%	-$52	-$569	-1.118%
Minnesota	$37,373	+10.71%	23.51%	29.7%	+$532	+$46	+0.855%
Delaware	$37,065	-0.64%	45.24%	28.1%	+$192	+$23	-0.071%
California	$37,036	+1.60%	23.14%	29.4%	+$299	+$818	+0.293%
Rhode Island	$36,153	+5.46%	25.31%	28.1%	+$247	+$229	+0.570%
Illinois	$36,120	-4.72%	24.65%	29.1%	+$160	+$337	-0.151%
Washington	$35,409	-2.63%	22.54%	31.3%	+$74	+$139	-0.317%

Source: Data compiled by Michigan Future Inc. using information from the Census Bureau, the U.S. Department of Labor, and the Bureau of Economic Analysis.

Table 9: States with the Lowest Tax Burden, Ranked among the Ten Lowest Tax States in All Three Measures

	Per Capita Personal Income		Share of Gross State Product High-Pay, Knowledge-Based Industries	Population Aged 25 or More with Bachelor's Degree or More	State & Local Taxes Compared with U.S. Average		
	Dollars 2005	Change compared with US 1993 to 2005, %	2004, percent	2004, Percent	Per Capita 2002	Per Employed 2002	%, Personal Income 2002
United States	**$34,586**	**NA**	**21.65%**	**27.0%**	**$3,142**	**$6,631**	**10.199%**
Tennessee	$31,107	-0.72%	15.28%	22.2%	-$902	-$1,860	-2.049%
Alabama	$29,136	+1.99%	15.11%	21.9%	-$973	-$1,783	-1.662%
South Dakota	$31,614	+10.83%	23.70%	23.2%	-$721	-$2,064	-1.258%
Montana	$29,387	+3.35%	13.55%	27.5%	-$797	-$1,865	-0.842%
Oregon	$32,103	-1.88%	15.96%	27.7%	-$586	-$1,336	-1.362%
South Carolina	$28,352	-0.30%	12.43%	24.6%	-$765	-$1,324	-0.827%

Source: Data compiled by Michigan Future Inc. using information from the Census Bureau, the U.S. Department of Labor, and the Bureau of Economic Analysis.

Strategic Priority 2: Invest in higher education first and foremost.

As we assess the assets Michigan has to prepare, retain, and attract talent, our higher education system rises to the top of the list. Michigan has spent decades building a world-class system of higher education, both universities and community colleges. They are arguably the most important assets we have in developing the concentration of talent we need to be successful in a knowledge-based economy. That is particularly true of our major research universities.

Higher education's importance in preparing talent for a knowledge economy is clear. But it also is one of the most important assets—if not the most important—in retaining and attracting talent. Our universities, particularly the research universities, are among the few enterprises in the state that attract talent from around the world: students, faculty, and researchers.

So the single most important thing policy makers can do for the future economic success of Michigan and its regions is to ensure the long-term success of a vibrant and agile higher education system.

Once again, Bill Gates in his NCSL remarks:

... take the two big leading industries, industries around biology and medicine, that's one, and industries around computer technology, that's two. The job creation and the success for those industries have been overwhelmingly in the locations where there is a great university. There's an almost perfect correlation between the number of jobs in a region and the strength of the universities. And, that will continue, whether it's new fields like nanotechnology, or those two fields I mentioned, on the ongoing strength that they'll have. And so for this country, we have to have the best universities. We're in very good shape on those. The top 30 or so in the world, we'd be over 25 of those. And, it's very impressive that although a number of those are private universities, almost half of those would be state universities as well. So, it's a phenomenal system. In fact, if you think of numbers, the state system turns out more world-class graduates than the private system. So, it's incredible how that's worked. And legislators have decisions to make about the level of investment that is made there, and really thinking through what the follow-on benefits for them are in terms of not only the country, but also their state as well.

Unfortunately, after decades of building a world-class higher education system, Michigan has been under-investing in our universities and community colleges for years. Over the past five years, state funding for higher education has been cut by 11.5%. Policy makers have consistently ranked higher education as a lower priority than tax cuts, K-12 education, prisons, and health care.

To make matters worse, policy makers have combined funding cuts with jaw-boning to get public higher education institutions to limit tuition increases, thus restricting the two main sources of revenue needed to insure their continued quality.

Despite a state constitutional guarantee of autonomy, there also has been an uptick in policy makers' interest in micro-managing public higher education institutions. A variety of state policy makers have tried to influence admission policies, curriculum, facilities funding, personnel policies, etc.

All of this threatens the quality of arguably Michigan's most important economic asset in a knowledge economy. What we need from policy—and are not getting—is a commitment to insure a system of higher education that is world-class in (1) preparing students for success in a flat world, and (2) contributing to new knowledge creation.

We need a new approach to state support for higher education, one that will give us a better chance of maintaining a high-quality and agile system of higher education for decades to come. We propose a new structure for state support of higher education. It would have three components:

Institutional independence at public universities and community colleges.

Each of our public community colleges and universities has a public governing body to represent the best interests of citizens. Beyond that, in a highly competitive industry, markets and competition are the best way to set prices and to insure long-term quality.

This means, most important, giving public higher education institutions autonomy over:

- Setting tuition. The quality of the education and the strength of the institutions in the long term are more important than the price of attending.
- Recruiting students. Universities should be free (in fact, encouraged) to recruit the most talented students from anywhere on the planet.
- Programs, curriculum, and pedagogy
- Facilities

Provide state funding to students, no matter where they come from, rather than to institutions.

With autonomy, institutions will control their revenue based on their ability to compete in the marketplace. The state's role should be to make higher education more affordable to students. We believe this is a terrific—probably the best—investment for the future economic success of the state. So, the higher proportion of tuition paid by the state, we believe the better for the state's future. The reality is,

given the state's chronic structural deficit, there is almost no chance of a substantial increase in higher education funding without a tax increase.

We recommend a single fund that would take the place of all state funding for higher education (including merit scholarships and capital outlays) and would provide students with a voucher/foundation grant.

Moving to a system of supporting students rather than institutions raises some big policy issues:

Which students? Our preference is all students: undergraduate and graduate; in-state, national, or international; and from all ages, right out of high school to mid-career.

Public funds would be used to help students from anywhere on the planet who can meet entrance requirements to better afford Michigan's higher education system. This might be the most powerful statement we can make that we want the most talented people in the world to come here to learn and ultimately live and work.

Which institutions? Certainly all public community colleges and universities. Our preference is also to include, maybe at a lower rate, campus-based private universities and colleges with a preponderance of full-time students pursuing four-year or graduate degrees.

Grants or loans? What matters most to Michigan's economic future is not where you grew up but where you choose to live and work after college. So our preference is to make more of the state support as loans to students, which become grants if they stay and work in Michigan for a relatively short time (3–5 years) after college.

Provide a substantial state match for federal research funding.

Create a second, smaller but still substantial, pool of funds that would provide a match (goal of 20%) for federal research funds. Universities could use funds either to provide a match to win grants or to invest in additional research or research facilities. Matching funds should be awarded to nonprofit research institutions that win federal research grants as well.

Research universities may be the most important assets Michigan has in creating a vibrant knowledge-driven economy. We can't emphasize enough, in a knowledge economy, the strategic importance of our major research universities. Communities across the globe, recognizing the importance of research universities, are trying to replicate what we already have here. One can make a strong case that the most productive state and local economic growth policies over the past several decades have been public investments in research universities in Austin, San Diego, and North Carolina's Research Triangle. The payoff in each case has been huge.

And yet for some reason, even though we have one of the great research universities in the world and two others that rank in the top 100 nationally, Michigan policy makers have never viewed major research universities as a key economic resource. This needs to change!

These universities are, in and of themselves (even if there are no spin-off jobs), major export-based enterprises. In total, Michigan universities bring in more than $1 billion annually in federal funds and employ thousands of knowledge workers. In addition, they are major retainers and attractors of talent from around the world. And, although there are no guarantees, places where new knowledge is being created have a big edge in being the places where new technologies are commercialized.

Strategic Priority 3: Build regions that are attractive places to live.

Do knowledge-based enterprises set up operations in communities with high concentrations of talent, as Bill Gates notes, or do knowledge workers locate in metropolitan areas with a high concentration of knowledge-based enterprises? Our guess is that it is a bit of both. So, successful metropolitan areas are both an attractive place to live and a place of economic opportunity—which increasingly means a concentration of knowledge-based employers, not just a job. It's a combination of both that makes a metropolitan area attractive to talented individuals and their families.

Michigan's metropolitan areas are having trouble offering either. Let's first consider quality of place.

Most college-educated households, like the rest of America, live in the suburbs, including the exurbs. But a larger proportion of the college-educated—particularly households without children—are choosing to live in central city neighborhoods. What is different over the past decade or so is that suburban growth in high-prosperity metropolitan areas is now accompanied by growth in their central cities. The evidence is that the most successful regions across the country are those where both the suburbs and central cities are prospering.

The Census Bureau reported 2004 data on the percentage of residents 25 years and older with a four-year degree or more for all American cities with a population of 250,000 or more. Those with 40% of more (in order): Seattle, San Francisco, Raleigh, Washington, Austin, Atlanta, Minneapolis, and Boston . Each, of course, is part of a successful knowledge-based economy. In many of these regions the central city has a higher proportion of four-year graduates than its suburbs.

What about our other heartland comparison central cities? Chicago, 30%; Omaha, 29%. Detroit is 68th (out of 70) at 11%. (Grand Rapids is too small to be included in the report.)

What seems to make central cities attractive places to live for talented individuals is that they offer something different from the suburbs. Many vibrant central city neighborhoods are characterized by an active street life. These neighborhoods are safe, have high densities, a mix of residential and commercial uses, an active arts and entertainment scene, and a walkable environment. These high-activity neighborhoods are largely, but not exclusively, located in and near downtown.

These neighborhoods are characterized by lots of young, affluent, and diverse residents on the streets at all hours of the day, including days where there is no big event. By and large, these are not the kind of neighborhoods that are available in Michigan today.

For many Michiganians, vibrant central cities are part of the past—no longer relevant, or just something you visit in unique places like Manhattan, Toronto, or Chicago. Think again! They are an important ingredient to future economic success. The pattern across the country is clear: high-prosperity metropolitan areas have central cities with a concentration of knowledge workers.

Michigan employers who are recruiting young talent from across the country understand this. Those we talked with for this project told us that the absence of a vibrant central city impedes their ability to attract talent.

It is our strong belief that our metropolitan areas need to put on their priority list vibrant central city neighborhoods. In metropolitan Detroit there are two central cities—Detroit and Ann Arbor—which have the potential of providing these high activity neighborhoods. Given that both have a long way to go to get to the needed scale, it would make sense for the region to put both on its priority list.

In a previous report, "Revitalizing Michigan's Central Cities," we laid out a framework for developing this kind of neighborhood. The framework involves actions in three areas: being welcoming to all, providing quality public services at a reasonable cost, and being development friendly. In addition, we recommend that when central cities make progress on each of these items, suburban and state support should be provided for these efforts.

(The report is available at http://michiganfuture.org/Reports/RevitalizingCities.pdf)

In addition to central cities that are attractive places for the talented to live, metropolitan areas need to provide a quality infrastructure. Traditionally this has meant physical infrastructure such as transportation, water, and sewer. These are still important, but it may turn out in a knowledge economy that the elements of infrastructure that matter most are (1) advanced connections to the Internet; (2) international airports;—both for their connections to the global economy—and (3) green infrastructure (system of open

spaces) as a key amenity in retaining and attracting talent. Michigan starts with some real advantages in our abundance of fresh water and a major international airport.

Strategic Priority 4: Attract export-based business investment.

The main impediment Michigan faces to the development of knowledge-based businesses is a lack of talent—not high business taxes or overly onerous regulations. When we have adequate talent, as is the case in the knowledge portion of the automotive industry, we attract enterprises from around the world.

Our framework for how best to attract export-based business investments:

(1) Business taxes should be easily understood and have the broadest base and lowest rate possible to raise needed revenues.

As we have seen, Michigan is not a high-tax state in combined state and local taxes. Nor are we a high business tax state. Ernst & Young on behalf of COSTS (a business trade group made up of large companies who do business in all 50 states) found in a thorough and, we believe, objective study of combined 2005 state and local business taxes that Michigan business taxes are 4.3% of private sector gross state product compared with an average of 4.8% nationally. In rank we tied for 36th. The two high-prosperity heartland states both ranked higher than Michigan: Minnesota, 4.9%; Illinois, 5.3%.

(The study can be found at:
http://www.ey.com/global/download.nsf/US/Total_State_and_Local_Business_Taxes_-_March_2006/$file/50_State_Tax_Study_03-2006.pdf)

We would prefer something like a corporate flat tax, one that would treat all enterprises—no matter their size or sector—equally. We have been unable to find any compelling evidence on whether a profits tax (which most states use) or gross receipts tax (which is the intended base of the Single Business Tax) is best in spurring long-term economic growth. (The Ernst & Young study looked at the composition of business taxes by state and, once again, it is hard to find a consistent pattern among high-prosperity states.)

In terms of special tax breaks to attract new business investments, we understand that no state is going to unilaterally stop providing incentives. We should, however, restrict special tax breaks to new investments by export-based businesses only. And we should support, not oppose, national efforts to restrict a state's ability to offer tax breaks for new investments.

(2) Regulations should be minimized so as to encourage competition and innovation. This can and should be done without reducing worker or environmental protections.

A good place to start: the motor vehicle industry. By far, this is the sector, today and for the foreseeable future, where knowledge-based enterprises in Michigan are concentrated. We should be the place where what's next in personal transportation is constantly invented, from re-imagining vehicles to how they are sold and serviced. Best way to get there: create a regulatory structure that is wide open for enterprises from anywhere on the planet to come to compete and innovate.

(3) We should stay away from trying to identify industries of the future to invest in. The vogue now around the country and the world is for government to provide incentives for what they think are high-growth industries of the future.

As we explored earlier, it is innovation in all export-based industries, not necessarily new industries, that drives state and metropolitan area economies. Who can imagine a state choosing coffee retailing or mortgage lending as sectors to invest in for future economic growth? And yet new enterprises such as Starbucks or Quicken Loans as well as innovative long-term enterprises such as Procter & Gamble and Stryker are drivers of regional economies just as much as the next Genetex or Google.

In addition, state investments in commercializing new technologies are high-risk investments with a predictably high failure rate. Even the best private investors have a hard time identifying the sectors, technologies, and enterprises that will be winners. State government, with far fewer resources to invest and far less experience, almost assuredly will have an even lower success rate. And for the few successes, there is no guarantee that they will be big job generators or that the enterprises will stay in state.

A better idea: invest heavily in basic research at our universities and nonprofit research institutions and let them drive commercialization efforts. If there is a market failure (as many believe) in the availability of capital for commercialization in Michigan, investment pools could be created from university and foundation endowments and public pension funds, rather than direct government funding.

Strategic Priority 5: Align K-12 education with a knowledge-driven economy.

It is with some trepidation that we include K-12 education on our policy agenda. We have expended so much effort on this as a country over the past decade with so few positive results, there is no clear set of reforms we can recommend that have a high probability of success.

Also, what seems to distinguish successful regions is their ability to retain and attract talent, not their K-12 systems. The pattern across the country is that children from households with college-educated adults, to a high degree, attend good K-12 schools and get four-year and advanced degrees. Those from

households without college-educated adults attend mediocre K-12 schools, at best, and, far too many don't get four-year degrees. This, of course, is particularly true for low-income African American and Hispanic children growing up in neighborhoods of concentrated poverty in central cities.

The chief reason to insist on a quality K-12 education system is the moral imperative to insure that all children get a quality education. K-12 education is the principle vehicle available for all children to have a real opportunity to achieve the American Dream. It is an invaluable, but time-limited, resource. Each day that a child spends not receiving a first-rate education, some of the potential rewards of a quality education are lost. And for those many children who are learning little during all of their K-12 education, the resource is lost forever.

Ultimately what we need are K-12 schools that prepare students for the flat world, schools that give students the best chance to take advantage of the many options that a constantly changing global economy will provide; schools that instill in children a love of learning and that develop both academic and soft skills.

The state has taken a major and courageous step toward aligning high school with the flat world in the adoption of the new high school graduation requirements. We trust that the new graduation requirements will be based on subject matter mastery, rather than prescriptive about courses and pedagogy.

As New York Times columnist David Brooks wrote in his November 13, 2005, column, getting the standards right is not sufficient to help many students prepare for a knowledge-driven and entrepreneurial economy:

Most people think of human capital the way economists and policy makers do—as the skills and knowledge people need to get jobs and thrive in a modern economy. . . .

But skills and knowledge— the stuff you can measure with tests— is only the most superficial component of human capital. U.S. education reforms have generally failed because they try to improve the skills of students without addressing the underlying components of human capital.

. . . We now spend more per capita on education than just about any other country on earth, and the results are mediocre. . . . The only things that work are local, human-to-human immersions that transform the students down to their very beings. Extraordinary schools, which create intense cultures of achievement, work. Extraordinary teachers, who inspire students to transform their lives, work. The programs that work touch all the components of human capital.

It is clear that more money is not the answer. There is not much evidence that high-spending states get better student achievement. Michigan is still a high-spending state on K-12 education, with very high teacher salaries and a high proportion of state and local spending devoted to K-12 education, but our results are average in terms of academic achievement.

It also is clear that the form of governance of schools is not a magic bullet either. Despite claims by advocates on all sides, the evidence is that in each system—district schools, public charter, parochial and independent—there are quality schools, but many that are not.

There are no shortcuts. We are going to have to do the hard work to develop a quality flat-world K-12 system. We need to develop educators—from superintendents to classroom teachers—who are thoroughly grounded in the realities of the flat world. And we need to give them the ability to experiment and innovate to help all students develop a love of learning and the academic and soft skills that are required to succeed in the flat world: to be successful rock climbers.

Two ideas on how to encourage both students and educators to align teaching and learning with the flat world:

- Allowing 11th and 12th graders (at their choice, not the district's) who meet academic standards to use their foundation grant to pay tuition to enroll early in college.
- Providing incentives to create more schools, such as the International Academy in Oakland County, where parents and students, not districts, can decide to enroll in high schools with standards aligned to the global economy. Ideally on a regional basis these schools would serve all students interested in a high-academics curriculum and would be partnered with industry and higher education institutions.

Strategic Priority 6: New leadership.

So that's it, our new agenda for a new Michigan. We understand that it is quite ambitious: seeking a realignment of our culture, institutions and policies. But this is one of those times when **not** to change is the high-risk strategy. Communities that get aligned with the realities of a flat world will do best.

It is inconceivable to us that these big changes can happen without strong civic and business (and ultimately political) leadership. If this project is going to avoid just sitting on the shelf, there needs to be some group with clout that takes ownership of this agenda. It is an essential ingredient in our future economic success.

The odds are that a new leadership structure needs to be created. Current leadership is predominantly connected to the old, declining economy. As Crain's Detroit Business reported in their March 20–26, 2006, issue, of the 51 most connected leaders in metropolitan Detroit, only two were in New Economy enterprises.

Given that so much of what needs to be done is regional, new leadership should be organized on a metropolitan area basis with the groups networked together for state action.

The most likely place to start building a new leadership is with leaders of those enterprises that are competing nationally or, better yet, internationally for talent. They are the enterprises who care most about our ability to prepare, retain, and attract talent.

This would include the knowledge part of our traditional manufacturing industries, primarily autos, both domestic and international; research universities; major health care systems; life sciences industry; IT industry; export-based financial institutions; etc. The structure should be open enough to include new enterprises: either companies locating here for the first time or successful knowledge-based startups.

We at Michigan Future, Inc. have made a long-term commitment to this effort. We are going to work hard at sharing our ideas with Michiganians—particularly those in leadership positions. Our initial goal is to change the public conversation in Michigan: switching to a discussion about how we do well in the economy of the future, rather than what we can do to save the past, or even worse, who is to blame for the decline of the old economy. In the longer term, we will try to be a catalyst for the formation of the kind of regional leadership structure we think is vital for our ultimate success.

We are willing to make this commitment because we know the payoff from success is huge. As scary and difficult as this change is, the evidence is that, just as it was a century ago, if Michigan is successful in making this transition we can become once again a place where if you are smart and willing to work hard, most Michiganians can and will earn a good income to raise a family and pass on a better opportunity to their children.

Appendix A: Performance of All Metro Areas with a Population over 1 Million, Ranked by Personal Income Per Capita in 2004

Area	Population 2004	Personal Income Per Capita 2004	Growth in Personal Income Per Capita 1990-2004	Share of Earnings, 2004		Population Aged 25 or More Bachelor's or More
				Manufacturing	High-Pay, Knowledge-Based Services	
United States	293,656,842	$33,050	69.7%	12.9%	22.4%	24.4%
San Jose-San Francisco-Oakland, CA (CSA)	7,148,000	$46,926	81.7%	15.1%	31.7%	37.3%
Washington-Baltimore-Northern Virginia, DC-MD-VA-WV (CSA)	8,050,560	$43,664	76.2%	3.9%	29.7%	37.1%
Boston-Worcester-Manchester, MA-NH (CSA)	5,802,063	$43,664	83.7%	12.0%	32.2%	34.4%
New York-Newark-Bridgeport, NY-NJ-CT-PA (CSA)	21,899,042	$43,428	65.2%	7.3%	37.6%	30.5%
Denver-Aurora-Boulder, CO (CSA)	2,605,861	$41,229	88.6%	7.9%	32.6%	35.5%
Seattle-Tacoma-Olympia, WA (CSA)	3,766,678	$40,081	82.9%	12.0%	25.7%	32.0%
Hartford-West Hartford-Willimantic, CT (CSA)	1,297,440	$39,918	61.8%	15.4%	29.9%	29.8%
Minneapolis-St. Paul-St. Cloud, MN-WI (CSA)	3,434,066	$39,796	80.2%	15.2%	27.0%	33.3%
Philadelphia-Camden-Vineland, PA-NJ-DE-MD (CSA)	5,949,976	$38,475	72.8%	11.6%	26.9%	26.9%
San Diego-Carlsbad-San Marcos, CA (MSA)	2,935,190	$37,965	82.1%	9.9%	24.1%	29.5%
Chicago-Naperville-Michigan City, IL-IN-WI (CSA)	9,610,038	$36,935	65.1%	13.2%	27.6%	28.9%
Houston-Baytown-Huntsville, TX (CSA)	5,277,455	$36,529	81.0%	12.6%	18.7%	26.5%
Milwaukee-Racine-Waukesha, WI (CSA)	1,707,181	$36,062	75.8%	22.2%	21.4%	26.2%
Detroit-Warren-Flint, MI (CSA)	5,424,253	$35,955	71.2%	21.6%	22.8%	23.7%
Richmond, VA (MSA)	1,156,849	$35,422	67.5%	9.7%	27.5%	29.2%
Dallas-Fort Worth, TX (CSA)	5,927,494	$35,105	70.7%	13.8%	24.2%	28.4%
Nashville-Davidson-Murfreesboro-Columbia, TN (CSA)	1,469,698	$34,559	85.7%	15.3%	18.8%	26.9%
St. Louis-St. Charles-Farmington, MO-IL (CSA)	2,829,371	$34,461	71.1%	14.9%	22.9%	25.3%
Pittsburgh-New Castle, PA (CSA)	2,490,915	$34,345	76.2%	14.4%	21.8%	23.8%
Miami-Fort Lauderdale-Miami Beach, FL (MSA)	5,355,903	$34,278	54.1%	5.1%	23.2%	22.9%
Cincinnati-Middletown-Wilmington, OH-KY-IN (CSA)	2,099,045	$34,221	74.9%	16.7%	22.3%	25.0%
Kansas City-Overland Park-Kansas City, MO-KS (CSA)	1,994,720	$34,207	76.6%	10.5%	27.3%	28.5%
Indianapolis-Anderson-Columbus, IN (CSA)	1,934,621	$34,186	75.1%	20.0%	17.6%	25.8%
Providence-New Bedford-Fall River, RI-MA (MSA)	1,627,194	$33,912	74.6%	15.0%	18.6%	23.6%
Portland-Vancouver-Beaverton, OR-WA (MSA)	2,062,109	$33,875	68.3%	15.8%	20.1%	27.7%
Sacramento-Arden-Arcade-Truckee, CA-NV (CSA)	2,157,974	$33,567	67.3%	6.9%	18.3%	26.5%
Cleveland-Akron-Elyria, OH (CSA)	2,938,607	$33,522	60.7%	18.9%	21.2%	23.5%
Raleigh-Durham-Cary, NC (CSA)	1,466,593	$33,292	67.4%	16.0%	22.7%	38.9%
Los Angeles-Long Beach-Riverside, CA (CSA)	17,481,473	$33,264	53.2%	12.2%	26.0%	24.4%
Atlanta-Sandy Springs-Gainesville, GA-AL (CSA)	5,121,741	$33,251	64.7%	9.6%	27.3%	32.0%
Columbus-Marion-Chillicothe, OH (CSA)	1,917,450	$33,109	75.2%	12.9%	23.5%	29.1%
Las Vegas-Paradise-Pahrump, NV (CSA)	1,686,210	$32,831	66.7%	3.1%	18.4%	16.4%
Memphis, TN-MS-AR (MSA)	1,248,492	$32,741	82.8%	10.2%	14.9%	22.7%
Louisville-Jefferson County-Elizabethtown-Scottsburg, KY-IN (CSA)	1,332,300	$32,543	79.3%	18.3%	17.0%	22.2%
Birmingham-Hoover-Cullman, AL (CSA)	1,160,814	$32,538	83.1%	10.0%	21.7%	24.7%

Note: Data on educational attainment from 2000 Census, using 1990s metro area definitions.
Income and earnings data from Bureau of Economic Analysis (REIS), May 2006, and includes self-employment income.

Appendix A: Performance of All Metro Areas with a Population over 1 Million, Ranked by Personal Income Per Capita in 2004

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				Manufacturing	High-Pay, Knowledge-Based Services	
United States	293,656,842	$33,050	69.7%	12.9%	22.4%	24.4%
Austin-Round Rock, TX (MSA)	1,411,199	$32,494	81.3%	14.6%	22.4%	36.7%
Albany-Schenectady-Amsterdam, NY (CSA)	1,140,770	$32,298	66.8%	8.9%	20.4%	28.2%
Jacksonville, FL (MSA)	1,223,741	$32,283	69.1%	6.5%	22.0%	22.9%
Charlotte-Gastonia-Salisbury, NC-SC (CSA)	2,067,297	$32,217	72.8%	15.6%	25.7%	26.5%
Virginia Beach-Norfolk-Newport News, VA-NC (MSA)	1,641,671	$31,811	75.8%	8.2%	14.3%	23.8%
Rochester-Batavia-Seneca Falls, NY (CSA)	1,135,679	$31,773	55.2%	23.8%	17.6%	27.1%
Tampa-St. Petersburg-Clearwater, FL (MSA)	2,586,417	$31,677	68.9%	7.4%	23.0%	21.7%
Phoenix-Mesa-Scottsdale, AZ (MSA)	3,713,291	$31,133	67.0%	10.6%	20.1%	25.1%
New Orleans-Metairie-Bogalusa, LA (CSA)	1,362,086	$30,693	77.7%	8.6%	17.0%	22.6%
Buffalo-Niagara-Cattaraugus, NY (CSA)	1,236,788	$30,627	65.2%	19.6%	17.7%	23.2%
Dayton-Springfield-Greenville, OH (CSA)	1,079,917	$30,591	64.5%	20.1%	16.0%	22.1%
Oklahoma City-Shawnee, OK (CSA)	1,210,109	$30,033	76.0%	12.8%	14.6%	24.4%
Salt Lake City-Ogden-Clearfield, UT (CSA)	1,559,957	$29,775	84.1%	12.3%	21.0%	26.5%
Greensboro-Winston-Salem-High Point, NC (CSA)	1,472,050	$29,658	55.9%	21.7%	16.6%	22.9%
Grand Rapids-Wyoming-Holland, MI (CSA)	1,305,498	$29,546	67.5%	29.5%	13.6%	22.9%
Orlando-The Villages, FL (CSA)	1,923,655	$29,256	61.4%	5.8%	21.3%	24.8%
San Antonio, TX (MSA)	1,852,508	$28,946	80.5%	7.4%	20.4%	22.4%
Greenville-Spartanburg-Anderson, SC (CSA)	1,172,838	$27,207	65.8%	25.9%	13.1%	20.7%
Fresno-Madera, CA (CSA)	1,004,515	$25,072	51.4%	9.2%	10.9%	16.8%

Note: Data on educational attainment from 2000 Census, using 1990s metro area definitions.
Income and earnings data from Bureau of Economic Analysis (REIS), May 2006, and includes self-employment income.

Appendix B: Employment in Selected Metro Areas, by Key Industries, 2004
(Note that government employment has been allocated by industry.)

Industry	United States	Michigan	Detroit CSA	Minneapolis CSA	Chicago CSA	Grand Rapids CSA	Omaha CSA
Total	129,278,180	4,301,743	2,341,459	1,841,927	4,313,496	582,016	439,904
Natural Resources & Mining	1,682,748	30,844	4,255	6,486	9,374	8,342	1,728
Construction	7,109,987	195,375	98,472	95,913	209,150	29,589	25,238
Manufacturing	14,300,351	695,529	349,588	234,547	514,767	137,067	36,166
Food (311)	1,490,556	32,730	8,491	18,403	51,382	9,379	12,941
Beverages (312)	193,844	4,597	2,580	1,763	6,466	599	325
Textile mills (313)	237,855	650	251	346	1,208	125	74
Textile product (314)	176,324	2,415	828	1,265	3,648	558	235
Apparel (315)	284,856	812	523	705	3,809	92	196
Leather (316)	42,629	1,473	130	1,250	1,070	800	106
Wood (321)	548,802	11,326	1,852	7,009	4,379	2,106	554
Paper (322)	493,342	14,797	3,523	8,631	20,729	3,550	1,087
Printing (323)	662,897	18,252	8,136	22,987	34,067	3,285	3,630
Petroleum (324)	112,303	1,500	1,211	2,179	4,981	145	4
Chemicals (325)	882,166	27,775	8,569	8,107	45,066	8,151	1,383
Plastics (326)	803,880	43,195	18,381	13,946	40,291	9,309	1,717
Nonmetallic minerals (327)	498,649	16,513	7,598	5,568	12,105	4,052	1,128
Primary metals (331)	465,995	27,648	9,668	4,540	33,158	6,882	787
Fabricated metals (332)	1,493,307	83,134	42,110	31,518	80,458	16,137	2,367
Machinery (333)	1,136,855	75,714	37,488	25,298	47,910	15,788	3,027
Computer (334)	1,315,351	19,163	9,215	42,966	35,656	6,411	2,119
Electrical equipment (335)	443,923	14,423	3,735	5,135	23,101	2,456	215
Transportation equip (336)	1,793,293	255,707	173,057	5,556	23,687	27,320	898
Motor Vehicle mfg. (3361)	256,490	70,844	58,198	1,687	3,091	2,533	64
Motor Vehicle Parts mfg. (3363)	690,721	168,955	107,293	1,223	15,671	23,244	144
Other transportation equip.	846,082	15,908	7,566	2,646	4,925	1,543	690
Furniture (337)	568,830	26,143	3,869	9,566	13,729	16,723	2,223
Miscellaneous (339)	654,695	17,562	8,373	17,810	27,866	3,201	1,151
Utilities (22)	819,995	21,758	8,721	8,054	18,019	2,076	4,805
Wholesale trade (42)	5,642,766	169,452	94,770	91,549	227,146	26,291	20,042
Retail trade (44-45)	15,122,766	512,583	263,257	207,330	470,017	66,998	54,440
Transportation (48-49)	5,128,058	132,576	80,983	78,464	218,352	15,164	24,444
Air transportation (481)	514,555	14,979	13,742	18,073	38,655	392	415
Support Activiites for air trans. (4881)	199,979	3,439	2,318	1,943	4,047	206	273
Other transportation	4,413,524	114,158	64,923	58,448	175,650	14,566	23,756
Information (51)	3,240,994	71,960	43,426	48,519	117,829	8,243	13,661
Publishing except internet (511)	907,928	25,248	16,567	20,213	31,438	2,984	2,970
Newspaper & Book publishers (5111)	672,590	17,918	10,155	15,167	27,968	2,537	2,736
Software publishers (5112)	235,339	7,330	6,411	5,046	3,470	448	234
Motion Picutes (512)	380,667	6,866	3,411	3,681	24,737	1,043	639
Broadcasting except internet (515)	325,314	6,726	3,565	3,199	6,532	929	1,855
Internet pub., broad. (516)	29,277	220	176	429	517	8	204
Telecommunications (517)	1,028,086	22,377	13,384	10,409	33,838	2,224	1,578
ISPs, data processing (518)	387,047	5,835	4,066	7,974	10,911	535	6,362
ISPs (5181)	117,887	1,376	460	695	1,338	231	541
Data Processing (5182)	269,160	4,459	3,607	7,278	9,572	304	5,821
Other information (519)	182,675	4,688	2,256	2,614	9,857	519	50

Source: Bureau of Labor Statistics, Covered Employment and Wages series. Undisclosed data estimated by authors.

Appendix B: Employment in Selected Metro Areas, by Key Industries, 2004
(Note that government employment has been allocated by industry.)

Industry	United States	Michigan	Detroit CSA	Minneapolis CSA	Chicago CSA	Grand Rapids CSA	Omaha CSA
Total	129,278,180	4,301,743	2,341,459	1,841,927	4,313,496	582,016	439,904
Finance & Insurance (52)	5,841,095	156,469	89,811	113,214	246,886	19,827	30,123
Monetary Authorities (521)	21,568	333	269	1,131	1,394	18	63
Credit Intermediation (522)	2,823,962	86,597	50,922	44,584	117,929	9,974	11,447
Securities, investments (523)	766,409	11,057	6,467	18,734	45,771	1,314	2,948
Insurance (524)	2,137,843	56,943	31,494	46,743	78,698	8,391	15,480
Funds, trusts (525)	91,313	1,538	658	2,022	3,094	130	185
Real estate & rental (53)	2,130,224	56,189	34,353	32,017	70,658	6,058	6,135
Professional & technical Services (54)	6,886,077	245,219	182,187	100,553	282,036	19,478	22,011
Legal Services (5411)	1,159,666	29,530	19,663	17,362	47,741	3,360	3,207
Accounting Services (5412)	834,449	28,004	17,384	12,006	37,822	3,255	2,258
Architectural & engineering ser (5413)	1,314,654	71,250	58,278	15,684	35,802	4,764	4,486
Engineering services (54133)	843,139	40,787	32,060	9,092	17,518	3,049	3,118
Testing laboratories (54138)	142,187	22,159	21,036	1,644	4,156	467	118
Other architectural services	329,328	8,304	5,182	4,948	14,128	1,248	1,250
Specialized design services (5414)	122,280	3,752	2,585	2,107	6,251	583	233
Computer Systems design (5415)	1,145,349	38,821	30,432	21,138	36,758	1,833	5,477
Management Consulting (5416)	785,866	18,848	12,639	9,507	49,373	1,570	1,964
Scientific Research (5417)	577,712	23,730	21,375	6,437	27,097	316	600
Advertising (5418)	431,005	16,131	11,709	9,378	23,341	1,734	1,299
Other professional services (5419)	515,096	15,153	8,122	6,932	17,850	998	2,486
Company Management (55)	1,696,538	68,003	48,586	59,041	67,231	6,977	10,785
Administrative services (56)	7,912,048	272,049	165,282	99,171	303,700	41,079	31,912
Educational services (61)	11,414,689	391,247	208,020	134,971	356,723	48,733	35,415
Elementary & secondary (6111)	7,684,584	271,669	140,971	91,040	239,327	37,505	23,067
Junior Colleges (6112)	652,524	19,060	9,290	4,996	22,007	1,698	2,254
Colleges & Universities (6113)	2,549,872	88,103	51,297	30,098	77,445	7,382	8,402
Other educational services	527,709	12,415	6,462	8,837	17,944	2,148	1,692
Health care & social services (62)	15,747,991	532,739	297,612	220,779	477,619	62,240	54,588
Ambulatory health services (621)	5,033,090	162,572	93,680	64,700	142,094	20,586	14,462
Hospitals (622)	5,461,249	212,417	124,379	65,079	191,551	23,113	19,984
Nursing & residential care (623)	3,027,058	94,862	45,273	51,360	77,713	12,913	12,986
Social assistance (624)	2,226,594	62,888	34,281	39,640	66,261	5,629	7,156
Arts & recreation (71)	2,229,569	64,096	38,609	31,531	96,069	6,908	6,997
Performing Arts, spectator sports (711)	394,040	9,616	6,595	6,806	12,329	974	1,914
Museums, parks (712)	203,345	3,742	2,280	3,354	8,299	275	1,173
Recreation & gambling (713)	1,632,184	50,738	29,732	21,371	75,442	5,658	3,909
Accomodation & food services (72)	10,671,676	344,552	174,019	143,758	315,785	41,624	35,296
Accomodation (721)	1,826,139	39,362	12,901	18,421	37,718	3,063	5,416
Food Services & Drinking Places (722)	8,845,537	305,190	161,118	125,337	278,067	38,561	29,879
Other services (81)	4,342,613	132,841	70,486	63,282	154,595	17,531	12,297
Public Administration (92)	7,118,641	195,320	89,022	74,205	167,304	17,812	16,034
Unclassified (99)	239,444	12,985	72	0	6,984	3	0

Source: Bureau of Labor Statistics, Covered Employment and Wages series. Undisclosed data estimated by authors.

Appendix C: Location Quotients in Selected Metro Areas, for Key Industries, 2004
(Note that government employment has been allocated by industry.)

Industry	Michigan	Detroit CSA	Grand Rapids CSA	Minneapolis CSA	Chicago CSA	Omaha CSA
Total	1.000	1.000	1.000	1.000	1.000	1.000
Natural Resources & Mining	0.551	0.140	1.101	0.271	0.167	0.302
Construction	0.826	0.765	0.924	0.947	0.882	1.043
Manufacturing	1.462	1.350	2.129	1.151	1.079	0.743
Food (311)	0.660	0.315	1.398	0.867	1.033	2.551
Beverages (312)	0.713	0.735	0.686	0.638	1.000	0.493
Textile mills (313)	0.082	0.058	0.117	0.102	0.152	0.091
Textile product (314)	0.412	0.259	0.703	0.504	0.620	0.392
Apparel (315)	0.086	0.101	0.072	0.174	0.401	0.202
Leather (316)	1.038	0.168	4.168	2.058	0.752	0.731
Wood (321)	0.620	0.186	0.852	0.896	0.239	0.297
Paper (322)	0.901	0.394	1.598	1.228	1.259	0.648
Printing (323)	0.827	0.678	1.101	2.434	1.540	1.609
Petroleum (324)	0.401	0.595	0.287	1.362	1.329	0.010
Chemicals (325)	0.946	0.536	2.052	0.645	1.531	0.461
Plastics (326)	1.615	1.262	2.572	1.218	1.502	0.628
Nonmetallic minerals (327)	0.995	0.841	1.805	0.784	0.728	0.665
Primary metals (331)	1.783	1.145	3.280	0.684	2.133	0.496
Fabricated metals (332)	1.673	1.557	2.400	1.481	1.615	0.466
Machinery (333)	2.001	1.821	3.085	1.562	1.263	0.782
Computer (334)	0.438	0.387	1.083	2.293	0.812	0.473
Electrical equipment (335)	0.976	0.465	1.229	0.812	1.560	0.142
Transportation equip (336)	* 4.285	5.328	3.384	0.217	0.396	0.147
Motor Vehicle mfg. (3361)	8.301	12.528	2.194	0.462	0.361	0.073
Motor Vehicle Parts mfg. (3363)	7.351	8.576	7.475	0.124	0.680	0.061
Other transportation equip.	0.565	0.494	0.405	0.219	0.174	0.240
Furniture (337)	1.381	0.376	6.530	1.180	0.723	1.148
Miscellaneous (339)	0.806	0.706	1.086	1.909	1.276	0.517
Utilities (22)	0.797	0.587	0.562	0.689	0.659	1.722
Wholesale trade (42)	0.902	0.927	1.035	1.139	1.206	1.044
Retail trade (44-45)	1.019	0.961	0.984	0.962	0.931	1.058
Transportation (48-49)	0.777	0.872	0.657	1.074	1.276	1.401
Air transportation (481)	0.875	1.475	0.169	2.465	2.251	0.237
Support Activiites for air trans. (4881)	0.517	0.640	0.229	0.682	0.607	0.401
Other transportation	0.777	0.812	0.733	0.929	1.193	1.582
Information (51)	0.667	0.740	0.565	1.051	1.090	1.239
Publishing except internet (511)	0.836	1.007	0.730	1.563	1.038	0.961
Newspaper & Book publishers (5111)	0.801	0.834	0.838	1.583	1.246	1.195
Software publishers (5112)	0.936	1.504	0.423	1.505	0.442	0.292
Motion Picutes (512)	0.542	0.495	0.609	0.679	1.948	0.493
Broadcasting except internet (515)	0.621	0.605	0.634	0.690	0.602	1.676
Internet pub., broad. (516)	0.226	0.332	0.061	1.028	0.529	2.048
Telecommunications (517)	0.654	0.719	0.481	0.711	0.986	0.451
ISPs, data processing (518)	0.453	0.580	0.307	1.446	0.845	4.831
ISPs (5181)	0.351	0.215	0.435	0.414	0.340	1.349
Data Processing (5182)	0.498	0.740	0.251	1.898	1.066	6.356
Other information (519)	0.771	0.682	0.631	1.004	1.617	0.080

Source: Bureau of Labor Statistics, Covered Employment and Wages series. Undisclosed data estimated by authors.

Appendix C: Location Quotients in Selected Metro Areas, for Key Industries, 2004
(Note that government employment has been allocated by industry.)

Industry	Michigan	Detroit CSA	Grand Rapids CSA	Minneapolis CSA	Chicago CSA	Omaha CSA
Total	1.000	1.000	1.000	1.000	1.000	1.000
Finance & Insurance (52)	0.805	0.849	0.754	1.360	1.267	1.516
Monetary Authorities (521)	0.464	0.689	0.185	3.680	1.937	0.858
Credit Intermediation (522)	0.922	0.996	0.785	1.108	1.252	1.191
Securities, investments (523)	0.434	0.466	0.381	1.716	1.790	1.130
Insurance (524)	0.800	0.813	0.872	1.535	1.103	2.128
Funds, trusts (525)	0.506	0.398	0.316	1.554	1.016	0.595
Real estate & rental (53)	0.793	0.890	0.632	1.055	0.994	0.846
Professional & technical Services (54)	1.070	1.461	0.628	1.025	1.228	0.939
Legal Services (5411)	0.765	0.936	0.644	1.051	1.234	0.813
Accounting Services (5412)	1.009	1.150	0.866	1.010	1.358	0.795
Architectural & engineering ser (5413)	1.629	2.448	0.805	0.837	0.816	1.003
Engineering services (54133)	1.454	2.099	0.803	0.757	0.623	1.087
Testing laboratories (54138)	4.684	8.168	0.730	0.812	0.876	0.244
Other architectural services	0.758	0.869	0.842	1.055	1.286	1.115
Specialized design services (5414)	0.922	1.167	1.059	1.209	1.532	0.560
Computer Systems design (5415)	1.019	1.467	0.355	1.295	0.962	1.405
Management Consulting (5416)	0.721	0.888	0.444	0.849	1.883	0.734
Scientific Research (5417)	1.234	2.043	0.121	0.782	1.406	0.305
Advertising (5418)	1.125	1.500	0.894	1.527	1.623	0.886
Other professional services (5419)	0.884	0.871	0.430	0.945	1.039	1.418
Company Management (55)	1.205	1.581	0.913	2.443	1.188	1.868
Administrative services (56)	1.033	1.153	1.153	0.880	1.150	1.185
Educational services (61)	1.030	1.006	0.948	0.830	0.937	0.912
Elementary & secondary (6111)	1.062	1.013	1.084	0.832	0.933	0.882
Junior Colleges (6112)	0.878	0.786	0.578	0.537	1.011	1.015
Colleges & Universities (6113)	1.038	1.111	0.643	0.828	0.910	0.968
Other educational services	0.707	0.676	0.904	1.175	1.019	0.942
Health care & social services (62)	1.017	1.043	0.878	0.984	0.909	1.019
Ambulatory health services (621)	0.971	1.028	0.909	0.902	0.846	0.844
Hospitals (622)	1.169	1.257	0.940	0.836	1.051	1.075
Nursing & residential care (623)	0.942	0.826	0.948	1.191	0.769	1.261
Social assistance (624)	0.849	0.850	0.562	1.250	0.892	0.944
Arts & recreation (71)	0.864	0.956	0.688	0.993	1.291	0.922
Performing Arts, spectator sports (711)	0.733	0.924	0.549	1.212	0.938	1.427
Museums, parks (712)	0.553	0.619	0.300	1.158	1.223	1.695
Recreation & gambling (713)	0.934	1.006	0.770	0.919	1.385	0.704
Accomodation & food services (72)	0.970	0.900	0.866	0.945	0.887	0.972
Accomodation (721)	0.648	0.390	0.373	0.708	0.619	0.872
Food Services & Drinking Places (722)	1.037	1.006	0.968	0.995	0.942	0.993
Other services (81)	0.919	0.896	0.897	1.023	1.067	0.832
Public Administration (92)	0.825	0.690	0.556	0.732	0.704	0.662
Unclassified (99)	1.630	0.017	0.003	0.000	0.874	0.000

Source: Bureau of Labor Statistics, Covered Employment and Wages series. Undisclosed data estimated by authors.

Appendix D: States Ranked by Per Capita Personal Income and Share of GSP in High-Education Export Service Industries

State	Per Capita Personal Income		Share of Gross State Product High Education Industries	Population Aged 25 or More with Bachelor's Degree or More	State & Local Taxes Compared with U.S. Average		
	Dollars 2005	Change compared with U.S. 1993 to 2005	2004, percent	2004	Per Capita 2002	Per Employed 2002	Personal Income 2002
United States	**$34,586**	**NA**	**21.65%**	**27.0%**	**$3,142**	**$6,631**	**10.199%**
Above the U.S. average in Both Per Capita Income and Share of GSP in High Education Industries							
District of Columbia	$54,985	21.28%	32.73%	47.7%	$2,574	$4,915	2.319%
Connecticut	$47,819	3.01%	31.05%	34.6%	$1,231	$2,239	0.090%
Massachusetts	$44,289	13.89%	28.58%	37.4%	$584	$739	-0.639%
New Jersey	$43,771	1.15%	23.23%	33.3%	$895	$1,791	0.076%
New York	$40,507	-0.92%	34.72%	30.5%	$1,495	$3,536	2.917%
Virginia	$38,390	8.82%	24.85%	32.7%	-$105	-$462	-0.998%
Colorado	$37,946	10.03%	25.55%	33.7%	-$52	-$569	-1.118%
Minnesota	$37,373	10.71%	23.51%	29.7%	$532	$46	0.855%
Delaware	$37,065	-0.64%	45.24%	28.1%	$192	$23	-0.071%
California	$37,036	1.60%	23.14%	29.4%	$299	$818	0.293%
Rhode Island	$36,153	5.46%	25.31%	28.1%	$247	$229	0.570%
Illinois	$36,120	-4.72%	24.65%	29.1%	$160	$337	-0.151%
Washington	$35,409	-2.63%	22.54%	31.3%	$74	$139	-0.317%
Below the U.S. average in Per Capita Income, above the U.S. average in Share of GSP in High Education Industries							
South Dakota	$31,614	10.83%	23.70%	23.2%	-$721	-$2,064	-1.258%
Above the U.S. average in Per Capita Income, below the U.S. average in Share of GSP in High Education Industries							
Maryland	$41,760	6.91%	21.14%	34.8%	$509	$644	-0.203%
New Hampshire	$38,408	9.62%	19.35%	32.1%	-$319	-$1,352	-1.906%
Wyoming	$36,778	22.09%	7.84%	24.8%	$501	$362	1.560%
Nevada	$35,883	-4.49%	18.14%	19.3%	-$175	-$551	-0.545%
Alaska	$35,612	-16.90%	10.17%	27.2%	$88	$181	-0.211%
Pennsylvania	$34,897	-1.49%	19.92%	24.7%	-$89	-$238	-0.356%

Source: Compiled by Michigan Future, Inc. using data from the Census Bureau, the U.S. Department of Labor and the Bureau of Economic Analysis.

Appendix D: States Ranked by Per Capita Personal Income and Share of GSP in High-Education Export Service Industries

	Per Capita Personal Income		Share of Gross State Product High Education Industries 2004, percent	Population Aged 25 or More with Bachelor's Degree or More 2004	State & Local Taxes Compared with U.S. Average		
State	Dollars 2005	Change compared with U.S. 1993 to 2005			Per Capita 2002	Per Employed 2002	Personal Income 2002
United States	**$34,586**	**NA**	**21.65%**	**27.0%**	**$3,142**	**$6,631**	**10.199%**
Below the U.S. average in Both Per Capita Income & Share of GSP in High Education Industries							
Hawaii	$34,539	-21.37%	13.72%	29.1%	$292	$608	1.457%
Nebraska	$33,616	8.18%	17.84%	26.6%	-$64	-$877	0.351%
Wisconsin	$33,565	3.07%	16.67%	24.1%	$279	-$159	1.196%
Vermont	$33,327	9.01%	15.21%	32.0%	$46	-$741	0.687%
Florida	$33,219	-4.22%	19.19%	25.4%	-$454	-$744	-1.150%
Michigan	**$33,116**	**-5.29%**	**18.91%**	**24.6%**	**-$90**	**-$157**	**-0.101%**
Kansas	$32,836	0.26%	19.49%	28.3%	-$202	-$744	-0.054%
Ohio	$32,478	-4.63%	18.53%	23.3%	$29	-$60	0.656%
Texas	$32,462	4.42%	19.11%	25.6%	-$427	-$770	-0.787%
Iowa	$32,315	10.63%	17.61%	23.9%	-$303	-$1,351	-0.089%
Oregon	$32,103	-1.88%	15.96%	27.7%	-$586	-$1,336	-1.362%
Missouri	$31,899	-1.42%	20.25%	24.3%	-$480	-$1,307	-0.812%
North Dakota	$31,395	15.32%	14.79%	24.0%	-$414	-$1,492	0.126%
Indiana	$31,276	-3.78%	13.25%	21.5%	-$382	-$953	-0.351%
Maine	$31,252	5.64%	15.50%	26.1%	$359	$305	2.416%
Georgia	$31,121	-4.20%	20.91%	25.6%	-$339	-$789	-0.378%
Tennessee	$31,107	-0.72%	15.28%	22.2%	-$902	-$1,860	-2.049%
North Carolina	$30,553	-5.94%	20.12%	24.6%	-$427	-$867	-0.327%
Arizona	$30,267	3.43%	18.86%	24.7%	-$491	-$826	-0.196%
Montana	$29,387	3.35%	13.55%	27.5%	-$797	-$1,865	-0.842%
Oklahoma	$29,330	2.62%	15.33%	22.2%	-$624	-$1,168	-0.461%
Alabama	$29,136	1.99%	15.11%	21.9%	-$973	-$1,783	-1.662%
Kentucky	$28,513	0.72%	13.04%	19.0%	-$506	-$775	0.180%
South Carolina	$28,352	-0.30%	12.43%	24.6%	-$765	-$1,324	-0.827%
Idaho	$28,158	-6.48%	14.47%	23.8%	-$694	-$1,543	-0.476%
Utah	$28,061	5.44%	21.27%	28.0%	-$563	-$1,230	0.160%
New Mexico	$27,644	0.98%	13.68%	23.6%	-$514	-$735	0.643%
West Virginia	$27,215	2.44%	11.32%	16.3%	-$570	-$449	0.517%
Arkansas	$26,874	-0.32%	14.64%	18.1%	-$755	-$1,261	0.018%
Mississippi	$25,318	3.56%	11.44%	18.9%	-$866	-$1,296	-0.003%
Louisiana	$24,820	-19.49%	12.61%	21.5%	-$420	-$210	0.606%

Source: Compiled by Michigan Future, Inc. using data from the Census Bureau, the U.S. Department of Labor and the Bureau of Economic Analysis.